FW

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,376	10/16/2001	Masahiro Fukuda	1163-0363P	3054

2292 7590 10/05/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER	
NATNAEL, PAULOS M	
ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/977,376	FUKUDA, MASAHIRO	
	Examiner	Art Unit	
	Paulos M. Natnael	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9-15,19-25* is/are rejected.

7)☒ Claim(s) *6-8 and 16-18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7-20-2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The information disclosure statement (IDS) received July 20, 2005 (but filed 2/11/04 according to the applicant) has been considered, and the signed Form PTO-1449 is being included herein in the present office action.

2. Claims 21-25, inadvertently left out in the previous office action have been considered to the merits herein as well.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim **21** is rejected under 35 U.S.C. 102(e) as being anticipated by Doornhein et al. U.S. Patent No. **6,078,360.**

Regarding claim **21**, Doornhein et al. (hereinafter, Doornhein) teaches a television signal comprising additional data, comprising video signal separator 43 and bit stream separator 45 (meeting the claimed transport stream), video signal processor 49, add'l data signal retrieval 51, information bit retriever 47 acts as a storage for the info (see fig.2) , and interrupter circuit 53 which combines the received data and outputs the

same to the display 55. Doornhein teaches of Fig.1 a separate add'l data signal generator or source, and combiners 9 and 11 which combine the video signal and the additional information signal. Thus, Doornhein meets all claimed subject matter as claimed.

5. Claims **21** are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. U.S. Patent No. **6,288,750.**

Considering claim 21, Yamada teaches decoding part 201 which decodes received video stream, additional information recognition part 203, which receives OSD data So, additional information Ss, and broadcast wave information Sb; and additional information reading part 207, and synthesizing part 209, which adds video data received from 205, and additional information outputted from the reading part 207, as well as OSD data outputted from the OSD data reading part 206. Thus, Yamada meets all claimed subject matter.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims **1-3,5, 9-13,15, and 19-20, 22-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada, U.S. Patent No. **6,288,750.**

Considering claim **1**, Yamada et al. discloses the following claimed subject matter, note;

a) a display video generation means for generating a display video signal based on a video signal received together with added information, is met by Decoder 201 Fig.2.

b) an associated information storage means for storing ... is met by ROM 212, which stores the OSD data (So), Additional information (Ss) and broadcast wave information (Sb) received from an outside source as shown in fig.2.

c) an information output means for outputting the associated information stored in said associated information storage means and the display video signal generated by said display video generation means while associating them with each other, is met by synthesizer 209, fig.2.

d) As to the associated information being interchangeable with the added information. Yamada teaches the two information signals are received separately, thus independent of each other. Yamada does not specifically say whether the associated information is interchangeable with the added information. Yamada however discloses that "Copy generation control and copy guard are performed on the basis of the additional information (CGMS, WSS or the like). Further, the CPU 7 generates OSD (On Screen Display) data So, and outputs this OSD data So and the above additional information Ss to a video decoder through a data bus 11. Here, OSD (On Screen Display) stands for a channel, a receiving mode, a volume, characters of text broadcasting and the like

displayed on a currently operating television screen. [emphasis added] (col. 5, lines 15-22) It would have been therefore obvious to the skilled in the art at the time the invention was made to readily recognize (and implement accordingly) that the additional information Ss which could be control data (**text**) such as CGMS, WSS, and the OSD which could be "characters of **text** broadcasting and the like" would be readily interchangeable.

Considering claim **2**, the output information control device according to Claim 1, wherein said information output means outputs both the associated information and the display video signal associated with the associated information so that they are synchronized with each other, is met by synthesizer 209, fig.2.

Considering claim **3**, the output information control device according to Claim 1, wherein said information output means combines the associated information and the display video signal so as to produce a composite signal;

See rejection of claim 2;

Considering claim **5**, Yamada discloses the following claimed subject matter, note;
a) an added information decoding means for decoding the added information signal so as to generate the added information, is met by Decoder 201, fig.2;

Except for;

b) wherein said information output means selects and outputs at least one from among the added information generated by said added information decoding means and the associated information stored in said associated information storing means;

Regarding b), the video decoder 200 through its synthesizer 209 combines the video signal, OSD data (So), Broadcast Wave Information (Sb), and the additional information (Ss) received along with the video signal and outputs the combined signal as a video signal output (see Figs.1,2,7 and 8). Yamada et al does not specifically disclose a selector to select at least one from the various signals received. However, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Yamada et al. by providing a selector or a switch within the decoder so that the user/viewer would have a choice of selecting, for example, either the OSD data and the video data, the broadcast wave information and the video data, or the additional information (which could be information such as caption, subtitles or other text) and the video data, instead of compelling the user to view all received signals, because the viewer may not want to view all such additional information superimposed with the video signal at all time.

Considering claim **9**, the output information control device according to Claim 1, further comprising a communication means for acquiring the associated information to be stored in said associated information storage means through bi-directional data communications by way of a communication line, is met by the bus 11.

Considering claim **10**, the output information control device according to Claim 1, further comprising a reading means for acquiring the associated information to be stored in said associated information storage means by reading the associated information from a storage medium, is met by CPU 7 .

Regarding claim **11,** see rejection of claim 1 (a)-(d).

Regarding claim **12**, see rejection of claim 2;

Regarding claim **13**, see rejection of claim 3;

Considering claim **15**, the output information control method according to claim 11, further comprising the step of decoding the added information signal so as to generate the added information, wherein said information output step includes the step of selecting and outputting at least one from among the generated added information and the stored associated information.

Regarding claim 15, see rejection of claim 5

Regarding claim **19**, see rejection of claim 9;

Regarding claim **20**, see rejection of claim 10;

Regarding claim **22**, see rejection of claim 1;

Claim **23** is met by the disclosure on Col. 5, lines 15-22. see also obviousness rejection as shown in claim 1 above.

As to claim **24**, see additional information Ss (fig.2) received from an independent outside source.

As to claim **25**, see rejection of claim 1 (d) and the obviousness rejection where it has been shown that the two data are independent and would be interchangeable because both may be text data, and therefore, by definition, interchangeable.

8. Claims **4, 14,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada, U.S. Patent No. **6,288,750** in view of Branscomb, U.S. Pat. No. 5,684,514.

Regarding claims 4 and 14, the claimed wherein an associated information stored in an associated information storage means is subdivided into a plurality of pieces of information to each of which a number identifying a corresponding part of the display video signal is assigned;

Regarding claims 4 and 14, Yamada does not specifically disclose subdividing the information in the storage means into plurality of pieces of information. However, dividing information for storage is notoriously well known in the memory/storage art. In that regard, Branscomb discloses an apparatus and method for assembling content addressable video "based on storing a plurality of frames of video data at addressable storage locations. Each frame of video data is stored with a tag which indicates the

contents of the video image defined by the associated frame." (see abstract) Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Yamada et al. by providing the method of content addressable storage of Branscomb so that any of the associated data stored in the memory RAM 202 or the main memory storage may be identified, tagged and retrieved separately requiring less processing time as well as taking less RAM space.

Response to Arguments

9. Applicant's arguments filed July 20, 2005 have been fully considered but they are not persuasive. Applicant argues that Yamada fails to disclose at least "associated information storage means for storing associated information independent from, and interchangeable with the added information", as recited in claim 1 (emphasis added), and storing information independent from and interchangeable with the added information," as recited in claim 11 (emphasis added).

Examiner submits that this line of argument simply has no basis in fact. Because it is clear from the fact that the two information are received separately, and no matter how repeatedly the Applicant denies this fact, examiner notes the two data/information are independent. In other words, additional information Ss and OSD data So are certainly independent from each other, at least the reason given above, i.e., because they are received separately from each other. That is to say, again, Yamada teaches the two information signals are received separately, thus independent of each other. Secondly, since the OSD data can be both text or image/graphics (see col. 5, lines 15-

22 quoted below), it would be obvious to those with ordinary skill in the art that such data could be interchangeable with the additional info such as CGMS data, which is also described as text data. Yamada does not specifically say whether the associated information is interchangeable with the added information. Yamada however discloses that "Copy generation control and copy guard are performed on the basis of the additional information (CGMS, WSS or the like). Further, the CPU 7 generates OSD (On Screen Display) data So, and outputs this OSD data So and the above additional information Ss to a video decoder through a data bus 11. Here, OSD (On Screen Display) stands for a channel, a receiving mode, a volume, characters of text broadcasting and the like displayed on a currently operating television screen. [emphasis added] (col. 5, lines 15-22) It would have been therefore obvious to the skilled in the art at the time the invention was made to readily recognize (and implement accordingly) that the additional information Ss which could be control data (**text**) such as CGMS, WSS, and the OSD which is also described as being "characters of **text** broadcasting and the like" would be readily interchangeable.

The argument against the Branscomb reference is predicated on the argument against the Yamada reference. Therefore, Applicant is directed to the response concerning the argument against Yamada.

Allowable Subject Matter

10. Claims **6-8, 16-18** remain objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koori (US 6,268,889) teaches video processing and transmitting method comprising RGB additional information generator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paulos M. Natnael
Primary Examiner
Art Unit 2614

Pmn
September 20, 2005